## (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 18 August 2005 (18.08.2005)

**PCT** 

(10) International Publication Number WO 2005/074579 A2

(51) International Patent Classification: Not classified

(21) International Application Number:

PCT/US2005/002962

(22) International Filing Date: 2 February 2005 (02.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/541,397 2 February 2004 (02.02.2004) US

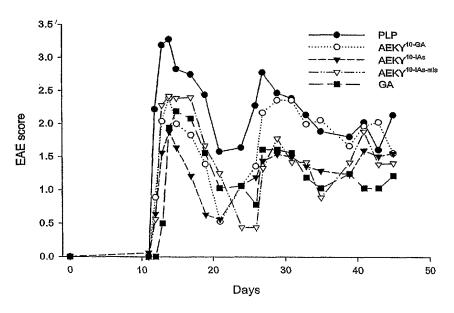
(71) Applicants (for all designated States except US): MIX-TURE SCIENCES, INC. [US/US]; 3550 General Atomics Court, San Diego, California 92121 (US). THE GOV-ERNMENT OF THE UNITED STATES OF AMER-ICA, AS REPRESENTED BY THE SECRETARY, DE-PARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; National Institutes of Health, Office of Technology Transfer, 6011 Executive Blvd., Suite 325, Rockville, Maryland 20852-3804 (US).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): HOUGHTEN, Richard, A. [US/US]; 239 Hill Street, Solana Beach, California 92075 (US). PINILLA, Clemencia [US/US]; 1656 Freda Lane, Cardiff, California 92007 (US). MARTIN, Roland [DE/US]; 4400 East West Highway, Apt. 431, Bethesda, Maryland 20814 (US). STURZEBECHER, Claus-Steffen [DE/DE]; Leonhardtstrasse 20, 14057 Berlin (DE). SHUKALIAK-QUANDT, Jaqueline [CA/US]; 123 Talbott Street, Rockville, Maryland 20851 (US). MCFARLAND, Henry, F. [US/US]; 9201 Brink Road, Gaithersburg, MD 20882-4205 (US).
- (74) Agent: HART, Daniel; KNOBBE MARTENS OLSON & BEAR LLP, 2040 Main Street, 14th Floor, Irvine, California 92614 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,

[Continued on next page]

(54) Title: PEPTIDE MIXTURES WITH IMMUNOMODULATORY ACTIVITY

## CM reduce clinical severity in PLP<sub>139-151</sub>-induced EAE



(57) Abstract: The present invention is related to complex peptide mixtures with immunomodulatory effects and methods for their use. The invention is further directed toward treatments of diseases through the modulation of the immune system with complex peptide mixtures. The invention is also directed to methods for improving the characteristics of complex peptide mixtures.



PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## **Declaration under Rule 4.17:**

— of inventorship (Rule 4.17(iv)) for US only

## Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.